

PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

**Crown Cork & Seal Company, Inc.
400 N. Walnut St.
Crawfordsville, IN 47933**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T107-7940-00004	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:

TABLE OF CONTENTS

A	SOURCE SUMMARY	5
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]	
A.3	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]	
A.4	Part 70 Permit Applicability [326 IAC 2-7-2]	
B	GENERAL CONDITIONS	6
B.1	Permit No Defense [326 IAC 2-1-10] [IC 13]	
B.2	Definitions [326 IAC 2-7-1]	
B.3	Permit Term [326 IAC 2-7-5(2)]	
B.4	Enforceability [326 IAC 2-7-7(a)]	
B.5	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.6	Severability [326 IAC 2-7-5(5)]	
B.7	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.8	Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]	
B.9	Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]	
B.10	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]	
B.11	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.12	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]	
B.13	Emergency Provisions [326 IAC 2-7-16]	
B.14	Permit Shield [326 IAC 2-7-15]	
B.15	Multiple Exceedances [326 IAC 2-7-5(1)(E)]	
B.16	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.17	Permit Modification, Reopening, Revocation and Reissuance, or Termination	
B.18	Permit Renewal [326 IAC 2-7-4]	
B.19	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.20	Permit Revision Under Economic Incentives and Other Programs	
B.21	Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]	
B.22	Operational Flexibility [326 IAC 2-7-20]	
B.23	Construction Permit Requirement [326 IAC 2]	
B.24	Inspection and Entry [326 IAC 2-7-6(2)]	
B.25	Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]	
B.26	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]	
C	SOURCE OPERATION CONDITIONS	18
	Emission Limitations and Standards [326 IAC 2-7-5(1)]	
C.1	Particulate Matter Emission Limitations For Processes with Process Weight Rates	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Operation of Equipment [326 IAC 2-7-6(6)]	
C.7	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]	
	Testing Requirements [326 IAC 2-7-6(1)]	
C.8	Performance Testing [326 IAC 3-6]	

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

- C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
- C.10 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
- C.11 Monitoring Methods [326 IAC 3]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

- C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
- C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]
- C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5]
- C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)]
- C.17 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]
- C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)]
- C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

Stratospheric Ozone Protection

- C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS - UV press and coating line #2 27

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.1.1 Volatile Organic Compounds (VOC) Limitations
- D.1.2 Volatile Organic Compounds (VOC) Limitations
- D.1.3 PSD [326 IAC 2-2] [40 CFR 52.21]
- D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.1.5 Testing Requirements [326 IAC 2-7-6(1)]
- D.1.6 Volatile Organic Compounds (VOC)

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- D.1.7 Record Keeping Requirements

D.2 FACILITY OPERATION CONDITIONS - Heatset offset press and coating line #3 & #4 . . . 29

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.2.1 Volatile Organic Compounds (VOC) Limitations
- D.2.2 Volatile Organic Compounds (VOC) Limitations
- D.2.3 PSD [326 IAC 2-2] [40 CFR 52.21]
- D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

- D.2.5 Regenerative thermal oxidizer
- D.2.6 Parametric Monitoring

Compliance Determination Requirements

- D.2.7 Testing Requirements [326 IAC 2-7-6(1)]
- D.2.8 Volatile Organic Compounds (VOC)

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

D.3 FACILITY OPERATION CONDITIONS - Heatset offset press and coating lines #5 & # 6 . 32

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOC) Limitations

D.3.2 Volatile Organic Compounds (VOC) Limitations

D.3.3 PSD [326 IAC 2-2] [40 CFR 52.21]

D.3.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

D.3.5 Regenerative thermal oxidizer

D.3.6 Parametric Monitoring

Compliance Determination Requirements

D.3.7 Testing Requirements [326 IAC 2-7-6(1)]

D.3.8 Volatile Organic Compounds (VOC)

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.9 Record Keeping Requirements

Certification	35
Emergency/Deviation Occurrence Report	36
Quarterly Compliance Report	48

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates stationary source for a punch press, printing and sheet coating facility.

Responsible Official: Mr. Joe Pierce
Source Address: 400 N. Walnut St., Crawfordsville, IN 47933
Mailing Address: 400 N. Walnut St., Crawfordsville, IN 47933
SIC Code: 3468
County Location: Montgomery County
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major under PSD,
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) UV press line equipped with one (1) sheet coater booth, identified as line #2, decorating and coating metal sheets, maximum line speed is 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer as control emissions, exhausting to stack I-1.
- (b) Two (2) heatset offset litho press lines each equipped with a sheet coater booth, identified as lines #3 & #4, decorating and coating metal sheets, each having a maximum line speed of 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer as control, exhausting to stack I-1.
- (c) Two (2) sheet coater booths, identified as #5 and #6, each coating metal sheets, each having maximum sheets per hour is 6,000, application method used is rollcoating, each using regenerative thermal oxidizer as control, exhausting to stack I-1.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22).

SECTION B

GENERAL CONDITIONS

B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]

- (a) Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7.
- (b) This prohibition shall not apply to alleged violations of applicable requirements for which the Commissioner has granted a permit shield in accordance with 326 IAC 2-1-3.2 or 326 IAC 2-7-15, as set out in this permit in the Section B condition entitled "Permit Shield."

B.2 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.3 Permit Term [326 IAC 2-7-5(2)]

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

B.4 Enforceability [326 IAC 2-7-7(a)]

- (a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.
- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.6 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, then the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit constitutes a violation of the Clean Air Act and is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]

- (a) Any application form, report, or compliance certification submitted under this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, and any other certification required under this permit, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, on the attached Certification Form, with each submittal.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining compliance of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Any insignificant activity that has been added without a permit revision; and
 - (6) Such other facts, as specified in Sections D of this permit, as IDEM, OAM, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

-
- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.13 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Management,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice, either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.14 Permit Shield [326 IAC 2-7-15]

- (a) This condition provides a permit shield as addressed in 326 IAC 2-7-15.
- (b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. Compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that:
 - (1) The applicable requirements are included and specifically identified in this permit; or
 - (2) The permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable.
- (c) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (d) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application.
- (e) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (f) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAM, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAM, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]

Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.

B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015
within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:
- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
 - (2) An emergency as defined in 326 IAC 2-7-1(12); or
 - (3) Failure to implement elements of the Preventive Maintenance Plan unless lack of maintenance has caused or contributed to a deviation.
 - (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.
- A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.
- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

**B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:

- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.18 Permit Renewal [326 IAC 2-7-4]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]
- (1) A timely renewal application is one that is:
 - (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due. [326 IAC 2-5-3]
 - (2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as being needed to process the application.
- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAM, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.19 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34) only if a certification is required by the terms of the applicable rule
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.20 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12 (b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]

The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a) and the following additional conditions:

- (a) For each such change, the required written notification shall include a brief description of the change within the source, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.
- (b) The permit shield, described in 326 IAC 2-7-15, shall not apply to any change made under 326 IAC 2-7-20(b).

B.22 Operational Flexibility [326 IAC 2-7-20]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any approval required by 326 IAC 2-1 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAM, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.23 Construction Permit Requirement [326 IAC 2]

Except as allowed by Indiana P.L. 130-1996 Section 12, as amended by P.L. 244-1997, modification, construction, or reconstruction shall be approved as required by and in accordance with 326 IAC 2.

B.24 Inspection and Entry [326 IAC 2-7-6(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-7-6(6)]
 - (1) The Permittee may assert a claim that, in the opinion of the Permittee, information removed or about to be removed from the source by IDEM, OAM, or an authorized representative, contains information that is confidential under IC 5-14-3-4(a). The claim shall be made in writing before or at the time the information is removed from the source. In the event that a claim of confidentiality is so asserted, neither IDEM, OAM, nor an authorized representative, may disclose the information unless and until IDEM, OAM, makes a determination under 326 IAC 17-1-7 through 326 IAC 17-1-9 that the information is not entitled to confidential treatment and that determination becomes final. [IC 5-14-3-4; IC 13-14-11-3; 326 IAC 17-1-7 through 326 IAC 17-1-9]
 - (2) The Permittee, and IDEM, OAM, acknowledge that the federal law applies to claims of confidentiality made by the Permittee with regard to information removed or about to be removed from the source by U.S. EPA. [40 CFR Part 2, Subpart B]

B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]
Pursuant to 326 IAC 2-1-6 and 326 IAC 2-7-11:

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permits Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (b) The written notification shall be sufficient to transfer the permit to the new owner by an administrative amendment pursuant to 326 IAC 2-7-11. The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) IDEM, OAM, shall reserve the right to issue a new permit.

B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- C.1 **Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(c)]**
Pursuant to 326 IAC 6-3-2(c), the allowable particulate matter emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard, and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- C.2 **Opacity [326 IAC 5-1]**
Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:
- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings, as determined in 326 IAC 5-1-4.
 - (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.
- C.3 **Open Burning [326 IAC 4-1] [IC 13-17-9]**
The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 **Incineration [326 IAC 4-2][326 IAC 9-1-2]**
The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.
- C.5 **Fugitive Dust Emissions [326 IAC 6-4]**
The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 **Operation of Equipment [326 IAC 2-7-6(6)]**
All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.
- C.7 **Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]**
(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory.

All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are mandatory for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.8 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment, no more than ninety (90) days after receipt of this permit. If due to circumstances beyond its control, this schedule cannot be met, the Permittee may extend compliance schedule an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.10 Maintenance of Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.

- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.11 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed to meet the applicable requirements of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ninety (90) days after the date of issuance of this permit.

The ERP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present in a process in more than the threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

- (a) Submit:

- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
 - (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
 - (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.
- (b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.14 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
[326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:
- (1) This condition;
 - (2) The Compliance Determination Requirements in Section D of this permit;
 - (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the

- Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:
- Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

C.17 Monitoring Data Availability [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)]

- (a) With the exception of performance tests conducted in accordance with Section C-Performance Testing, all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.

- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements stated in (a) above.

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;
 - (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
 - (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that improper maintenance did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.

- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Quarterly Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported.
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period.
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports.
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Stratospheric Ozone Protection

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) UV press line equipped with one (1) sheet coater booth, identified as line #2, decorating and coating metal sheets, maximum line speed is 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer to control emissions, exhausting to stack I-1.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) Limitations

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to sheets of metal shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Clear Coat	4.3
Extreme Performance Coat	3.5
All Other Coat	3.0

- (b) If more than one (1) emission limitation in section D.1.1(a) applies to a specific coating then the least stringent emission limitation shall be applied.
- (c) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) The UV press line is not required to be controlled by the regenerative thermal oxidizer since the UV press line will be in compliance without control.

D.1.2 Volatile Organic Compounds (VOC) Limitations

Pursuant to 326 IAC 8-2-3 (Can Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal sheets for the purpose of fabricating of metal cans (at other CC & S) shall be limited to 2.8 pounds of VOC per gallon of coating less water, delivered to the coating applicator from two-piece can exterior operations.

D.1.3 PSD Minor Limit [326 IAC 2-2] [40 CFR52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.1, D.1.2 and D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1 and D.1.2.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month; and
 - (6) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (b) Two (2) heatset offset litho press lines each equipped with a sheet coater booth, identified as lines #3 & #4, decorating and coating metal sheets, each having a maximum line speed of 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer as control, exhausting to stack I-1.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) Limitations

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC per gallon of coating excluding water, delivered to rollcoating.
- (b) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-9, (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain an overall control efficiency of 87.8%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 35.2, 28.7, or 24.6 per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

- (d) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

.2.2 Volatile Organic Compounds (VOC) Limitations

Pursuant to 326 IAC 8-2-3 (Can Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal sheets for the purpose of fabricating of metal cans (at other CC & S) shall be limited to 2.8 pounds of VOC per gallon of coating less water, delivered to the coating applicator from two-piece can exterior operations.

- (b) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-3, (2.8 when coating metal cans) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain an overall control efficiency of 87.8%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 23 per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

D.2.3 PSD Minor Limit [326 IAC 2-2] [40 CFR52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.2.5 Regenerative thermal oxidizer

The regenerative thermal oxidizer shall operate at all times that lines 3 and 4 are in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1600 °F during operation or a temperature and fan amperage determined from the most recent compliant stack test. The temperature correlates to an overall VOC control efficiency of 87.8 % based on the stack capture and destruction efficiency test conducted on July 17, 1996.

D.2.6 Parametric Monitoring

A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the reading is below the above mentioned temperature for any one reading

Compliance Determination Requirements

D.2.7 Testing Requirements [326 IAC 2-7-6(1)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC testing utilizing Methods 25 (40 CFR 60, Appendix A) for VOC or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.2.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.2.1, D.2.2 and D.2.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1, D.2.2 and D.2.3, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1, D.2.2 and D.2.3.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month; and
 - (6) The weight of VOCs emitted for each compliance period.
 - (7) The continuous temperature records for the catalytic incinerator and the temperature used to demonstrate compliance during the most recent compliance stack test.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (e) Two (2) sheet coater booths, identified as #5 and #6, each coating metal sheets, each having maximum sheets per hour is 6,000, application method used is rollcoating, each using regenerative thermal oxidizer as control, exhausting to stack I-1.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOC) Limitations

- a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC per gallon of coating excluding water, delivered to rollcoating.
- (c) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-9, (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain a overall control efficiency of 87.8%. 326 IAC 8-2-9 allows emissions of 4.3 and 3.0 pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator which is equivalent to 10.3 pounds of VOC per gallon of solids for clear coatings, and 5.07 pounds of VOC per gallon of solids for coatings dried at temperatures greater than 90° C (194° F), respectively. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 35.2, 28.7, nor 24.6 per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

- d) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

D.3.2 Volatile Organic Compounds (VOC) Limitations

- (a) Pursuant to 326 IAC 8-2-3 (Can Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal sheets for the purpose of fabricating of metal cans (at other CC & S) shall be limited to 2.8 pounds of VOC per gallon of coating less water, delivered to the coating applicator from two-piece can exterior operations.
- (b) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-3, (2.8 when coating metal cans) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain an overall control efficiency of 87.8%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 23 per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] \times \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

D.3.3 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.3.5 Regenerative thermal oxidizer

The regenerative thermal oxidizer shall operate at all times that lines 5 and 6 are in operation. When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1600 °F during operation or a temperature and fan amperage determined from the most recent compliant stack test. The temperature correlates to an overall VOC control efficiency of 87.8 % based on the stack capture and destruction efficiency test conducted on July 17, 1996.

D.3.6 Parametric Monitoring

A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer or measuring operating temperature. The output of this system shall be recorded, and that temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the reading is below the above mentioned temperature for any one reading.

Compliance Determination Requirements

D.3.7 Testing Requirements [326 IAC 2-7-6(1)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC testing utilizing Methods 25 (40 CFR 60, Appendix A) for VOC or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.3.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.3.1, D.3.2 and D.3.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.1, D.3.2, and D.3.3 the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.3.1, D.3.2 and D.3.3.
 - (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each month; and
 - (6) The weight of VOCs emitted for each compliance period.
 - (7) The continuous temperature records for the regenerative thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Crown Cork & Seal Company, Inc.
Source Address: 400 N. Walnut St. Crawfordsville, IN 47933
Mailing Address: 400 N. Walnut St. Crawfordsville, IN 47933
Part 70 Permit No.: T 107-7940-00004

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Crown Cork & Seal Company, Inc.
Source Address: 400 N. Walnut St. Crawfordsville, IN 47933
Mailing Address: 400 N. Walnut St. Crawfordsville, IN 47933
Part 70 Permit No.: T 107-7940-00004

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
9	1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9	2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY COMPLIANCE REPORT**

Source Name: Crown Cork & Seal Company, Inc.
Source Address: 400 N. Walnut St. Crawfordsville, IN 47933
Mailing Address: 400 N. Walnut St. Crawfordsville, IN 47933
Part 70 Permit No.: T 107-7940-00004

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted quarterly. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (e.g. Permit Condition D.1.3)	Number of Deviations	Date of each Deviations

Form Completed By: _____
Title/Position: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management
Office of Air Management**

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Crown Cork & Seal Company, Inc.
Source Address: 400 N. Walnut St., Crawfordsville, IN 47933
SIC Code: 3468
County Location: Montgomery County
Operation Permit No.: T107-7940-00004
Permit Reviewer: Peggy Zukas

The Office of Air Management (OAM) has reviewed a Part 70 permit application from Crown Cork & Seal Company, Inc. relating to the operation of a punch press, printing and sheet coating facility.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) One (1) UV press line equipped with one (1) sheet coater booth, identified as line #2, decorating and coating metal sheets, maximum line speed is 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer as control emissions, exhausting to stack I-1.
- (b) Two (2) heatset offset litho press lines each equipped with a sheet coater booth, identified as lines #3 & #4, decorating and coating metal sheets, each having a maximum line speed of 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer as control, exhausting to stack I-1.
- (c) Two (2) sheet coater booths, identified as #5 and #6, each coating metal sheets, each having maximum sheets per hour is 6,000, application method used is rollcoating, each using regenerative thermal oxidizer as control, exhausting to stack I-1.

Unpermitted Emission Units and Pollution Control Equipment Requiring ENSR

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Requiring ENSR

There are no new facilities to be reviewed under the ENSR process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Space heaters, process heaters, or boilers using the following fuels:

- (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (B) Propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour.
- (2) The following VOC and HAP storage containers:
 - (A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
- (3) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (4) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (5) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.
- (6) Closed loop heating and cooling systems.
- (7) Infrared cure equipment.
- (8) Noncontact cooling tower systems with either of the following:
 - (A) Natural draft cooling towers not regulated under a NESHAP.
 - (B) Forced and induced draft cooling tower system not regulated under a NESHAP.
- (9) Heat exchanger cleaning and repair.
- (10) Process vessel degreasing and cleaning to prepare for internal repairs.
- (11) Conveyors as follows:
 - Enclosed systems for conveying plastic raw materials and plastic finished goods.
- (12) Asbestos abatement projects regulated by 326 IAC 14-10.
- (13) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

Other categories with emissions below insignificant thresholds:

- (14) Sheet Lubricant - (Magnudraw MB-5036) This lubricant is used to lubricate sheets as they enter punch presses which form crowns. the estimated annual usage of this lubricant is 3960 gal/yr.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) CP - 107-6410-00004, issued on January 7, 1997; and
- (2) CP (107) 1928- 00004, issued on December 21, 1990 superseded CP No. PC (54) 1743 and OP 54003-93-0144 and 54-03-93-0145.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (1) CP 107-6410-00004, issued on January 7, 1997

Condition 11 : That the particulate matter (PM) overspray from the surface coating facilities shall be prevented from being visible detectable at the exhaust or accumulating on the rooftops or on the ground.

Reason not incorporated: The condition was not incorporated into the Part 70 permit because the application method for applying the coating is rollcoating rather than spraying.

- (2) CP 107-6410-00004, issued on January 7, 1997

Condition 11 : That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

Reason not incorporated: The condition was not incorporated into the Part 70 permit because the application method for applying the coating is rollcoating rather than spraying.

- (3) CP 107-6410-00004, issued on January 7, 1997

Condition 8 : That particulate matter emissions from the six drying ovens and space heating equipment shall comply with 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating). particulate matter emissions from the above listed equipment shall be limited to 0.44 pounds per million Btu heat input, pursuant to that rule.

Reason not incorporated: The condition was not incorporated into the Part 70 permit because this rule (326 IAC 6-2) only applies to boilers rather than ovens, and space heaters.

- (4) CP (107) 1928, issued on December 21, 1990

Condition number 4: That the coating organic solvent concentration and gallons applied shall be limited such that the total amount of organic solvent delivered to the coating applicators of lines Nos. 1, 2, 3, and 4 shall not exceed 3.7 tons per month per individual line.

Reason not incorporated: The condition is out of date. Line 1 was not constructed, line 2 has been modified and all three lines 2, 3, and 4 are now being controlled by a regenerative thermal oxidizer.

- (5) CP (107) 6410, issued on January 7, 1997

Condition number 12: That the thermal incinerator shall operate at all times that lines 5 and 6 are in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1400° F during non-catalytic operation or 750° F during catalytic operation or a temperature, fan amperage and duct velocity determined in the compliance test to maintain a minimum 90% destruction of the volatile organic compound (VOC) captured.

Reason not incorporated: The condition stated that the minimum operating temperature shall be 1400° F. However, this temperature was determined before a test which provided the capture and destruction efficiency of the thermal oxidizer. To insure compliance, the minimum operating temperature shall be 1600° which is representative of the temperature reading during a test performed on July 17, 1996.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on December 18, 1996. A notice of completeness letter was mailed to the source on January 17, 1997.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct.

The following are OAM calculations.

In order to determine the new usage limit, calculations were performed for lines 3 and 4.	In order to determine the VOC limit (after control), calculations were performed for lines 5 and 6.
$(\text{usage limit}) \times (1 - \text{destruction efficiency}^*) = \text{limit}_{\text{VOC}}^*$ $(\text{usage limit}) \times (1 - 90\%) = 3.7 \text{ tons/month}_{\text{VOC}}$ usage limit = 3.7 tons/month _{VOC}	$(\text{usage limit}^{**}) \times (1 - \text{destruction efficiency}^{**}) = \text{limit}_{\text{VOC}}$ $(28 \text{ tons/month}) \times (1 - 90\%) = \text{limit}_{\text{VOC}}$ 2.8 tons/month = limit _{VOC}

* The destruction efficiency and VOC limit came from the CP (107) 1928, issued December 21, 1990.

** The destruction efficiency and usage limit came from the CP (107) 1928, issued December 21, 1990.

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	0.42
PM-10	0.42
SO ₂	0.08
VOC	630.6
CO	4.9
NO _x	14.0

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Xylene	greater than 10
MIBK	greater than 10
Formaldehyde	less than 10
Ethylbenzene	greater than 10
Benzene	less than 10
Glycol Ethers	greater than 10
Naphthalene	less than 10
Cumene	less than 10
Propylene	less than 10
MEK	greater than 10
Isophorone	greater than 10
Styrene	less than 10
Toluene	less than 10
Phenol	greater than 10
TOTAL	greater than 25

- (a) The potential emissions (as defined in 326 IAC 1-2-55) of volatile organic compounds are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in 326 IAC 1-2-55) of any single HAP is equal to or greater than ten (10) tons per year and the potential emissions (as defined in 326 IAC 1-2-55) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 1996 OAM emission data. However, the HAPs emissions were determined by the Crown Cork & Seal Company, Inc.

Pollutant	Actual Emissions (tons/year)
PM	0.114
PM-10	0.114
SO ₂	0.023
VOC	48.5
CO	1.3
NO _x	3.8
Xylene	12.2
Ethylbenzene	1.94
Cumene	0.32
MIBK	2.04
Formaldehyde	0.06
Glycol Ethers	3.92
Isophorone	0.62

Limited Potential to Emit

The table below (please see next page) summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Coating booth 2				40 tons/year			
Coating booth 3				3.7 tons per month (after control) 4.3, 3.6, and 3.0 lbs of VOC/gallon of coating			
Coating booth 4				3.7 tons per month (after control) 4.3, 3.6, and 3.0 lbs of VOC/gallon of coating			
Coating booth 5 and 6				2.8 tons/yr (after control) 10.3 lbs of VOC/gallon of solids for clear coatings and 10.3 lbs of VOC/gallon of solids dried 4.3, 3.6, and 3.0 lbs of VOC/gallon of coating			

County Attainment Status

The source is located in Montgomery County.

Pollutant	Status
TSP	attainment
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

Volatile organic compounds (VOC) and oxides of nitrogen (Nox) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Montgomery County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) The presses are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.430, Subpart (QQ)), because this rule only applies to rotogravure presses. The type of presses being used are UV press and heatset offset litho press.
- (b) Crown Cork & Seal Company, Inc. is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart (Q) because the source does not use chromium-based water treatment chemicals.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than ten (10) tons per year of HAPs or one hundred (100) tons per year of volatile organic compounds. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

State Rule Applicability - Individual Facilities

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to sheets of metal shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Clear Coat	4.3
Extreme Performance Coat	3.5
All Other Coat	3.0

- (b) If more than one (1) emission limitation is subsection (d) applies to a specific coating then the least stringent emission limitation shall be applied.

326 IAC 8-2-4 (Coil Coating Operations) applies only to operations that coat flat metal sheets or strips in a continuous coil. This condition does not apply because the coil is cut into coil sheets before the surface coating operations.

326 IAC 6-3-2 (Process Operations)

This rule is not applicable because the surface coating booths application method is rollcoating thus, no particulates will be emitted.

326 IAC 4-2-1 (Incinerators)

This rule is not applicable because the incinerator is burning solvent fumes from the press and coating lines only.

326 IAC 8-3-1 (Organic solvent degreasing operations)

This rule does not apply to the closed top degreasing unit because the degreasing operation was installed prior to 1980.

Pursuant to CP 107-6410-00004, issued on January 7, 1997, any change or modification which may increase potential emissions to 40 tons per year from the equipment covered in this permit shall obtain a Prevention of Significant Deterioration (PSD) permit pursuant to 326 IAC 2-2 before such change may occur. (Since the potential emissions were less than 40 tons/year no VOC limits were necessary).

Pursuant to CP (107) 1928, issued on December 21, each line shall use no more than 37 tons of VOC (444 tons per year before control), including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit VOC to 3.7 tons per month per line. Compliance with this limit makes the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21 not applicable.

Pursuant to CP (107) 1928, issued on December 21, line 5 and 6 shall use no more than a combined total of 28 tons of VOC (336 tons per year before control), including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit VOC to 2.8 tons per month. Compliance with this limit makes the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21 not applicable.

Pursuant to CP (107) 1928, issued on December 21, 1990, lines 5 and 6 shall comply with 326 IAC 8-2-9 by daily averaging of emissions after controls. The daily average allowable and actual emissions will fluctuate due to the amount of each type of coating used daily on each line. 326 IAC 8-2-9 allows emissions of 10.3 pounds of VOC per gallon of solids for clear coatings and 5.07 pounds VOC per gallons of solids for coatings dried at temperatures greater than 90 °C (194° F). Note that this allowable amount refers to the VOC content of the coatings, not the total emissions of the line which are limited by condition D.3.2. The quarterly reports required by condition D.3.7. require that a compilation of the results of each calculation be submitted to the office of Air Management. Daily average allowable and actual emissions of volatile organic compounds (VOC) in pounds VOC per gallon of solids shall be calculated for each line based on gallons of solid delivered to the coating applicator, the pounds of VOC per gallon of solids, the type coating (clear or dried at temperature greater than 194° F), and the overall control efficiency of the incinerator.

The Regenerative thermal oxidizer shall operate at all times that lines 2, 3, 4, 5 and 6 are in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1600 °F during operation or a temperature, fan amperage and duct velocity determined in the compliance test to maintain a minimum capture efficiency of 88.77% and 90% destruction of volatile organic compound (VOC) captured.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The thermal incinerator has applicable compliance monitoring conditions as specified below:

The thermal incinerator shall operate at all times that lines 3, 4, 5 and 6 are in operation. When operating, the thermal incinerator shall maintain a minimum operating temperature of 1,600 °F with a negative pressure in the duct work at a range of 1.5 to 2.0 inches to maintain a minimum capture efficiency of 88.77% and 90% destruction of volatile organic compound (VOC) captured or a temperature and pressure drop determined from the most recent compliant stack test.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Part 70 Application Form GSD-08.

This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments.

Conclusion

The operation of a punch press, printing and sheet coating facility this shall be subject to the conditions of the attached proposed **Part 70 Permit No. T107-7940-00004**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Crown Cork & Seal Company, Inc.
Source Address: 400 N. Walnut St., Crawfordsville, IN 47933
SIC Code: 3468
County Location: Montgomery County
Operation Permit No.: T107-7940-00004
Permit Reviewer: Peggy Zukas

On October 2, 1998, the Office of Air Management (OAM) had a notice published in the Journal Review, Crawfordsville, Indiana, stating that Crown Cork & Seal Company, Inc. had applied for a Part 70 Operating Permit to operate press, printing and sheet coating facility. The notice also stated that OAM proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 22, 1998, Crown Cork & Seal Company, Inc. submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

Comment 1:

This condition requires the annual emission statement to cover the twelve months from December through November. Crown is requesting that this be revised to cover the twelve months from January through December, to be consistent with our recordkeeping system.

Response to comment 1:

Condition C.16 (b)

Since the company shall submit an annual emission statement certified by July 1 instead of April 15, the annual emission statement twelve month time period shall start January 1, and ending December 31 instead of starting December 1, and ending November 30. The following condition has been changed:

- (b) The annual emission statement covers the twelve (12) consecutive month time period starting ~~December 1~~ **January 1** and ending ~~November 30~~ **December 31**. The annual emission statement must be submitted to:

Comment 2:

It appears that these two conditions (Conditions D.1.1(c) and D.2.1(c)) limit the VOC content of each individual coating material applied on these lines (2, 3, and 4). This is not consistent with Condition D.3.1(c) which permits a volume weighted averaging approach to determining compliance with the emissions limits contained in 326 IAC 8-2-9.

All lines in the facility are subject to the emission limits contained in 326 IAC 8-2-9 and therefore should have the same conditions. Crown is requesting that conditions D.1.1(c) and D.2.1(c) be revised to read like condition D.3.1(c) to permit daily volume weighted averaging on lines 2, 3, and 4.

Response to comment 2:

Section D.1 has been revised since the UV press line is connected to the thermal oxidizer however, the control is not necessary in order to be in compliance with 326 IAC 8-2-9. Furthermore, the thermal oxidizer is not necessary to limit emissions to below 40 tons per year since the potential emissions are less than 40 tons/yr. The OAM has also removed the monitoring condition from section D.1 due to the previous reasons.

Not all section Ds will have the same conditions because OAM must take into account the following when determining the applicable condition.

1. What date was the facilities installed?
2. Will control equipment be utilized?
3. Is the control equipment necessary in order to be in compliance with a rule?
3. Is the facility in compliance with a rule and etc?

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (a) One (1) UV press line equipped with one (1) sheet coater booth, identified as line #2, decorating and coating metal sheets, maximum line speed is 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer to control emissions, exhausting to stack I-1.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) Limitations

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to sheets of metal shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Clear Coat	4.3
Extreme Performance Coat	3.5
All Other Coat	3.0

- (b) If more than one (1) emission limitation in section D.1.1(a) applies to a specific coating then the least stringent emission limitation shall be applied.

- (c) Pursuant to 326 IAC 8-1-2(a)(7), volume weighted averaging of the coatings shall be used to determine compliance with the limitation set in condition (a). This volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] \times \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

- (d) (c) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (d) The UV press line is not required to be controlled by the regenerative thermal oxidizer since the UV press line will be in compliance without control.

~~D.1.2 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]~~

~~Pursuant to CP 107-6410-00004, issued on January 7, 1997, any change or modification which may increase potential to emit VOC's to 40 tons per year from the equipment covered in this permit shall obtain a Prevention of Significant Deterioration (PSD) permit pursuant to 326 IAC 2-2 before such change may occur.~~

D.1.2 3 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

D.1.3 4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

~~D.1.4 5 Regenerative thermal oxidizer~~

~~When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1600 °F during operation or a temperature and fan amperage determined from the most recent compliant stack test. The temperature correlates to an overall VOC control efficiency of 87.8 % based on the stack capture and destruction efficiency test conducted on July 17, 1996.~~

Compliance Determination Requirements

D.1.5 6 Testing Requirements [326 IAC 2-7-6(1)]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.1.1 and D.1.2 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.1.6 7 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1-7 8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each ~~day~~ month; and
 - (6) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.1.8 Reporting Requirements~~

~~A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.~~

Since the line one (1) was never installed and lines 2, 3, 4, 5, and 6 are controlled by a thermal oxidizer, having an overall VOC control efficiency of 87.8%, the potential to emit is less than 250 and the actual emissions after control are less than 100 tons per year. Thus, conditions D.2.1(e) and D.2.2 shall be removed. The following condition shall replace D.2.1(e) and D.2.2:

~~D.2-2 3 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]~~

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (b) Two (2) heatset offset litho press lines each equipped with a sheet coater booth, identified as lines #3 & #4, decorating and coating metal sheets, each having a maximum line speed of 4,500 sheets/hour, application method is roll coating, using regenerative thermal oxidizer as control, exhausting to stack I-1.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Volatile Organic Compounds (VOC) Limitations

- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), the volatile organic compound (VOC) content of coatings applied to sheets of metal shall be limited to:

Coatings	Limit (pounds of VOC/gallon of coating less water delivered to the applicator)
Clear Coat	4.3
Extreme Performance Coat	3.5
All Other Coat	3.0

- (b) If more than one (1) emission limitation in section D.2.1 (a) applies to a specific coating then the least stringent emission limitation shall be applied.

- (c) Pursuant to 326 IAC 8-1-2(a)(7), volume weighted averaging of the coatings shall be used to determine compliance with the limitation set in condition (a). This volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] \times \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

- (d) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC per gallon of coating excluding water, delivered to rollcoating.
- (b) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-9, (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain an over all control efficiency of 87.8%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 35.2, 28.7, or 24.6 per gallon of coating solids delivered to the applicator.

- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day
or other unit of time.

- (d) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- ~~(e) Pursuant to CP (107) 1928, issued on December 21, 1990 the input of VOC to each line and the usage of cleanup solvent for the each line shall be limited to 3.7 tons per month per line. This limitation will prevent the VOC emissions from each line being greater than 44.4 tons per year.~~

~~D.2.2 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]~~

~~Pursuant to CP (107) 1928, issued on December 21, 1990, each line shall use no more than 3.7 tons of VOC (44.4 tons per year before control), including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit VOC to 3.7 tons per month per line. Compliance with this limit makes the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21 not applicable.~~

D.2.2 Volatile Organic Compounds (VOC) Limitations

Pursuant to 326 IAC 8-2-3 (Can Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal sheets for the purpose of fabricating of metal cans (at other CC & S) shall be limited to 2.8 pounds of VOC per gallon of coating less water, delivered to the coating applicator from two-piece can exterior operations.

- (b) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-3, (2.8 when coating metal cans) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain an over all control efficiency of 87.8%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 23 per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

**Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day
or other unit of time**

D.2.2 3 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

D.2.3 4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.2.4 5 Regenerative thermal oxidizer

The regenerative thermal oxidizer shall operate at all times that lines 3 and 4 are in operation. When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1600 °F during operation or a temperature and fan amperage determined from the most recent compliant stack test. The temperature correlates to an overall VOC control efficiency of 87.8 % based on the stack capture and destruction efficiency test conducted on July 17, 1996.

D.2.5 6 Parametric Monitoring

A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the reading is below the above mentioned temperature for any one reading.

Compliance Determination Requirements

D.2.6 7 Testing Requirements [326 IAC 2-7-6(1)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC testing utilizing Methods 25 (40 CFR 60, Appendix A) for VOC or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.2.7 8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.2.1 and D.2.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.8 9 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.1, D.2.2 and D.2.3, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.2.1, D.2.2 and D.2.3.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each day month; and
 - (6) The weight of VOCs emitted for each compliance period.
 - (7) The continuous temperature records for the regenerative thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test.**
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.9 Reporting Requirements

~~A quarterly summary of the information to document compliance with Condition D.2.1 and D.2.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.~~

Since the line one (1) was never installed and lines 2, 3, 4, 5, and 6 are controlled by a thermal oxidizer, having an overall VOC control efficiency of 87.8%, the potential to emit is less than 250 and the actual emissions after control are less than 100 tons per year. Thus, conditions D.3.2 shall be removed. The following condition shall replace D.3.1(e) and D.3.2:

D.3.2 3 PSD Minor Limit [326 IAC 2-2] [40 CFR52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (e) Two (2) sheet coater booths, identified as #5 and #6, each coating metal sheets, each having maximum sheets per hour is 6,000, application method used is rollcoating, each using regenerative thermal oxidizer as control, exhausting to stack I-1.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOC) Limitations

- a) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts or products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC per gallon of coating excluding water, delivered to rollcoating.
- (c) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-9, (4.3 when using clear coating, 3.5 when using extreme performance coating, or 3.0 for all other coatings) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain a overall control efficiency of 87.8%. 326 IAC 8-2-9 allows emissions of 4.3 and 3.0 pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator which is equivalent to 10.3 pounds of VOC per gallon of solids for clear coatings, and 5.07 pounds of VOC per gallon of solids for coatings dried at temperatures greater than 90° C (194° F), respectively. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 35.2, 28.7, nor 24.6 per gallon of coating solids delivered to the applicator.
- (d) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day
or other unit of time

- c) Pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), solvent sprayed from the application equipment during clean up or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized.

- ~~d) That the combined input of 28 tons of VOC (336 tons per year before control) to both lines 5 and 6 and the usage of cleanup solvent for the both lines shall be limited to 2.8 tons per month combined. This limitation will prevent the VOC emissions from both lines being greater than 249 tons per year. This limitation is based upon the use of a control device with an overall control efficiency of 87.8%.~~

~~D.3.2 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]~~

~~Pursuant to CP (107) 1928, issued on December 21, 1990, line # 5 and 6 shall use no more than a combined total of 28 tons of VOC (336 tons per year before control), including coatings, dilution solvents, and cleaning solvents, per month. This usage limit is required to limit the potential to emit VOC to 2.8 tons per month. Compliance with this limit makes the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21 not applicable.~~

D.3.2 Volatile Organic Compounds (VOC) Limitations

- (a) Pursuant to 326 IAC 8-2-3 (Can Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal sheets for the purpose of fabricating of metal cans (at other CC & S) shall be limited to 2.8 pounds of VOC per gallon of coating less water, delivered to the coating applicator from two-piece can exterior operations.
- (b) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-3, (2.8 when coating metal cans) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain an over all control efficiency of 87.8%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 23 per gallon of coating solids delivered to the applicator.
- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day
or other unit of time

D.3.2 3 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

~~D.3.3 4 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]~~

~~Pursuant to CP (107) 1928, issued on December 21, 1990, lines Nos. 5 and 6 shall comply with 326 IAC 8-2-9 by daily averaging of emissions after controls. The daily average allowable and actual emissions will fluctuate due to the amount of each type of coating used daily on each line. 326 IAC 8-2-9 allows emissions of 10.3 pounds of VOC per gallon of solids for clear coatings and 5.07 pounds VOC per gallons of solids for coatings dried at temperatures greater than 90°C (194°F). Note that this allowable amount refers to the VOC content of the coatings, not the total~~

~~emissions of the line which are limited by condition D.3.2. The quarterly reports required by condition D.3.7. require that a compilation of the results of each calculation be submitted to the office of Air Management. Daily average allowable and actual emissions of volatile organic compounds (VOC) in pounds VOC per gallon of solids shall be calculated for each line based on gallons of solid delivered to the coating applicator, the pounds of VOC per gallon of solids, the type coating (clear or dried at temperature greater than 194°F), and the overall control efficiency of the oxidizer.~~

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.3.5 Regenerative thermal oxidizer

The regenerative thermal oxidizer shall operate at all times that lines 5 and 6 are in operation. When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1600 °F during operation or a temperature and fan amperage determined from the most recent compliant stack test. The temperature correlates to an overall VOC control efficiency of 87.8 % based on the stack capture and destruction efficiency test conducted on July 17, 1996.

D.3.6 Parametric Monitoring

A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer or measuring operating temperature. The output of this system shall be recorded, and that temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the reading is below the above mentioned temperature for any one reading.

Compliance Determination Requirements

~~D.3.7 Testing Requirements [326 IAC 2-7-6(1)]~~

~~The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC limit specified in Condition D.3.1, D.3.2 and D.3.3 shall be determined by a performance test conducted in accordance with Section C- Performance Testing.~~

D.3.7 Testing Requirements [326 IAC 2-7-6(1)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC testing utilizing Methods 25 (40 CFR 60, Appendix A) for VOC or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

D.3.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.3.1, D.3.2 and D.3.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.9 Record Keeping Requirements

- (a) To document compliance with Conditions D.3.1, D.3.2 and D.3.3, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken as stated below and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Conditions D.3.1, D.3.2 and D.3.3.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The volume weighted VOC content of the coatings used for each day;
 - (4) The cleanup solvent usage for each month;
 - (5) The total VOC usage for each day; and
 - (6) The weight of VOCs emitted for each compliance period.
 - (7) The continuous temperature records for the regenerative thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test.**
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.10 Reporting Requirements

~~A quarterly summary of the information to document compliance with Condition D.3.1, and D.3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.~~

Comment 3:

These conditions require that daily records of cleanup solvent usage be maintained for each line. What is the regulatory basis for this requirement? Clean up solvent emissions are not regulated under 326 IAC 8-2-9 and each line only has a monthly VOC emission limit.

Based on the above and the difficulty in accurately recording the amount of cleanup solvent used per day per line, Crown is requesting that this condition be revised to require monthly records of cleanup solvent usage.

Response to comment 3:

Conditions D.1.6, D.2.8 and D.3.9

The condition shall be modified as follows:

D.(1-6 8)(2-8 9)(3-9 10) Record Keeping Requirements

- (a) To document compliance with Conditions D.(1.1), (2.1), (2.2), (3.1), ~~(3.2)~~, (3.3) the Permittee shall maintain records in accordance with (1) through (6) or (7) below. Records maintained for (1) through (6) or (7) shall be taken **daily as stated below** and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.(1.1), (2.1), (2.2), (3.1), (3.2), (3.3).
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) A log of the dates of use;
- (3) The volume weighted VOC content of the coatings used for each day;
- (4) The cleanup solvent usage for each ~~day~~ **month**;
- (5) The total VOC usage for each ~~day~~ **month**; and

Upon further review, the OAM has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table Of Contents has been modified to reflect these changes.

Comment 1:
Condition B.28

The IDEM now believes that this condition is not necessary and has removed it from the permit. The issues regarding credible evidence can be adequately addressed during a showing of compliance or noncompliance. Indiana's statutes, and the rules adopted under their authority, govern the admissibility of evidence in any proceeding. Indiana law contains no provisions that limit the use of any credible evidence and an explicit statement is not required in the permit.

~~B.28 — Credible Evidence [326 IAC 2-7-5(3)][62 Federal Register 8313][326 IAC 2-7-6]~~

~~Notwithstanding the conditions of this permit that state specific methods that may be used to assess compliance or noncompliance with applicable requirements, other credible evidence may be used to demonstrate compliance or non-compliance.~~

Comment 2:

The following has been deleted:

C.1 Major Source

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.

~~Any change or modification which may increase potential emissions to 40 tons per year from the equipment covered in this permit shall obtain a Prevention of Significant Deterioration (PSD) permit pursuant to 326 IAC 2-2 before such change may occur.~~

Comment 3:

Section D.2 was modified to include compliance monitoring condition (D.2.4) and condition D.3.5 was modified to revise the compliance monitoring plan. The changes are as follows:

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.2.4 5 Regenerative thermal oxidizer

The regenerative thermal oxidizer shall operate at all times that lines 3 and 4 are in operation. When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1600 °F during operation or a temperature and fan amperage determined from the most recent compliant stack test. The temperature correlates to an overall VOC control efficiency of 87.8 % based on the stack capture and destruction efficiency test conducted on July 17, 1996.

and

D.3.5 6 Regenerative thermal oxidizer

The regenerative thermal oxidizer shall operate at all times that lines 5 and 6 are in operation. When operating, the thermal oxidizer shall maintain a minimum operating temperature of 1600 °F during operation or a temperature, fan amperage and duct velocity determined in the most recent compliance test to maintain a minimum VOC capture efficiency of 88.8% and

~~90% a minimum VOC destruction efficiency of 98.9% destruction of volatile organic compound (VOC) captured or a temperature and pressure drop fan amperage determined from the most recent compliant stack test.~~ The temperature correlates to an overall VOC control efficiency of 87.8 % based on the stack capture and destruction efficiency test conducted on July 17, 1996.

Comment 4:

The OAM has included parametric monitoring for conditions D.2.6 and D.3.7 to insure that the oxidizer is operating efficiently:

D.2.6 D.3.6 Parametric Monitoring

A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. The output of this system shall be recorded, and that temperature shall be greater than or equal to the temperature used to demonstrate compliance during the most recent compliance stack test. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when the reading is below the above mentioned temperature for any one reading.

Comment 5:

The OAM will require stack testing for the thermal oxidizer because the oxidizer is necessary in order for the coating booths to comply with 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations).

D.2.7 and D.3.7 Testing Requirements [326 IAC 2-7-6(1)]

During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform VOC testing utilizing Methods 25 (40 CFR 60, Appendix A) for VOC or other methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Comment 6:

The OAM has revised condition D.2.9 and D.3.9, and included condition number 7 which requires continuous temperature records.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

- (7) The continuous temperature records for the regenerative thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test.

Comment 7:

OAM has included calculations located in Appendix A.

Comment 8:

Because of conditions changes in sections D.1, D.2, and D.3, the following forms have been deleted:

1. Three (3) monthly summary of daily organic solvent compliance
2. Part 70 Quarterly Report
3. Part 70 Quarterly Report

Comment 9:

The following conditions have been changed since OAM does not consider this source major but rather minor since the potential to emit is less than 250 tons per year.

~~D.1.2 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]~~

~~Pursuant to CP 107-6410-00004, issued on January 7, 1997, any change or modification which may increase potential to emit VOC's to 40 tons per year from the equipment covered in this permit shall obtain a Prevention of Significant Deterioration (PSD) permit pursuant to 326 IAC 2-2 before such change may occur.~~

D.1.3 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit of VOC are less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

Comment 10:

In 1990, the source emissions PSD allowable were 241 tons/yr of VOC. However, in 1997 OAM used 337 tons/yr of VOC as the source wide emissions thus, causing the source to be major. By making the source major, when the source added equipment in 1997, the source agreed to a less than 40 ton/yr limit so this would be a minor modification to a major source. This is incorrect because the source wide emissions were 241 tons/yr of VOC not 337 tons/yr of VOC. Therefore, OAM has relaxed the less than 40 tons/yr limit and the source has agreed to less than 250 tons/yr. Since the PTE is less than 250 tons/year, no reporting requirements will be necessary.

The following comments were received on April 4, 1999.

Comment 1:

Condition D.3.3 includes the following statement " The quarterly reports described in condition D.3.7..."

In reviewing condition D.3.7, there is no reference to quarterly reports. Are the quarterly reports still required? If so, should D.3.7 include a description of them?

Response to comment 1:

Condition D.3.3 has been deleted and incorporated into condition D.3.1.

~~D.3.3 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]~~

~~Pursuant to CP (107) 1928, issued on December 21, 1990, lines Nos. 5 and 6 shall comply with 326 IAC 8-2-9 by daily averaging of emissions after controls. The daily average allowable and actual emissions will fluctuate due to the amount of each type of coating used daily on each line. 326 IAC 8-2-9 allows emissions of 10.3 pounds of VOC per gallon of solids for clear coatings and 5.07 pounds VOC per gallons of solids for coatings dried at temperatures greater than 90°G (194° F). The quarterly reports required by condition D.3.7. require that a compilation of the results of each calculation be submitted to the office of Air Management. Daily average allowable and actual emissions of volatile organic compounds (VOC) in pounds VOC per gallon of solids shall be calculated for each line based on gallons of solid delivered to the coating applicator, the pounds of VOC per gallon of solids, the type coating (clear or dried at temperature greater than 194° F), and the overall control efficiency of the incinerator.~~

Comment 2:

Condition D.2.4 the incinerator was tested at 1450 F not 1600 F. This should be changed.

Response to comment 2:

Now condition D.2.5

In order for OAM to accept the lower temperature of 1450 degrees Fahrenheit, a stack test will have to be performed at that temperature. The company should choose the highest VOC lbs/gal coating and determine the minimum overall control efficiency necessary to comply with 326 IAC 8-2-9. Then you will need to test for overall control. For example, if you test at 1600 degrees Fahrenheit and get 87.8 but you really only need 80 percent, you must test to show what temperature correlates to 80 percent.

Comment 3:

Condition D.2.5 still refers to a catalytic oxidizer. The catalytic units were replaced by the regenerative thermal oxidizer. This condition needs to be revised.

Response to comment 3:

The OAM has made the correction.

Comment 4:

Condition D.3.6 still refers to a catalytic oxidizer. The catalytic units are replaced by the regenerative thermal oxidizer. This condition needs to be revised.

Response to comment 4:

The OAM has made the correction.

Comment 5:

I also just realized that the facility will occasionally coat metal sheets for the eventual fabrication of metal cans (at other CC&S) facilities. I bring this up since the emission limit for sheet basecoatings and overvarnishes for metal cans is 2.8 lb VOC/gal less water per 326 IAC 8-2-3. Should a reference to this be added to D.1.1, D.2.1 and D.3.1?

Response to comment 5:

The OAM has concluded that Crown Cork and Seal (CC & S) is subject to 326 IAC 8-2-3 (Can coating operation) because the facility will coat metal sheets for the eventual fabrication of metal cans (at other CC & S) facilities. The sources that fabricate the metal cans will not be combined with CC & S located in Crawfordsville, Indiana because the nearest CC & S source is approximately 100 miles.

The Crown Cork and Seal is not subject to 40 CFR Part 60.490 Subpart WW (Standards of Performance for the Beverage Can Surface Coating Industry) because the coating booths are not coating beverage cans.

The following state rule will be included in conditions D.1.2, D.2.2 and D.3.2:

Pursuant to 326 IAC 8-2-9 (Can Coating Operations), the volatile organic compound (VOC) content of coatings applied to metal sheets for the purpose of fabricating of metal cans (at other CC & S) shall be limited to 2.8 pounds of VOC per gallon of coating less water, delivered to the coating applicator from two-piece can exterior operations.

The following conditions will be included in D.2.2 and D.3.2 since the thermal oxidizer is required to operate in order to be in compliance.

- (b) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-3, (2.8 when coating metal cans) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain an overall control efficiency of 87.8%. These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 23 per gallon of coating solids delivered to the applicator.

- (c) Pursuant to 326 IAC 8-1-2(a)(7), when volume weighted averaging of the coatings is used to determine compliance with the limitation set in condition (a), this volume weighted average shall be determined by the following equation:

$$A = [3 (C \times U) / 3 U] * \text{percent efficiency of the thermal oxidizer}$$

Where: A is the volume weighted average in pounds VOC per gallon
C is the VOC content of the coating in pounds VOC per gallon
and U is the usage rate of the coating in gallons per unit, hour, day or other unit of time

OAM has made the following revision to the Title V permit:

- 1) The source has been determined to PSD minor thus, Condition C.1 has been deleted from the permit.

~~C.1 Major Source~~

~~Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source.~~

- 2) The condition D.3.1 has been revised and condition D.3.3 has been deleted.

~~D.3.1 Volatile Organic Compounds (VOC) Limitations~~

- (c) When operating the thermal oxidizer to achieve the limit for rule 326 IAC 8-2-9, (4.3 **when using clear coating**, 3.5 **when using extreme performance coating**, or 3.0 **for all other coatings**) pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator, the thermal oxidizer shall maintain a overall control efficiency of 87.8%. **326 IAC 8-2-9 allows emissions of 4.3 and 3.0 pounds of VOC emitted to the atmosphere per gallon of coating less water delivered to the applicator which is equivalent to 10.3 pounds of VOC per gallon of solids for clear coatings, and 5.07 pounds of VOC per gallon of solids for coatings dried at temperatures greater than 90° C (194° F), respectively.** These efficiencies and the use of the thermal oxidizer are required by rule 326 IAC 8-1-2(a)(2). Based upon 326 IAC 8-1-2(c) and the overall control efficiency of (87.8)%, the VOC content of the coating shall not exceed 35.2, 28.7, nor 24.6 per gallon of coating solids delivered to the applicator.

~~D.3.4 Prevention of Significant Deterioration [326 IAC 2-2 and 40 CFR 52.21]~~

~~Pursuant to CP (107) 1928, issued on December 21, 1990, lines Nos. 5 and 6 shall comply with 326 IAC 8-2-9 by daily averaging of emissions after controls. The daily average allowable and actual emissions will fluctuate due to the amount of each type of coating used daily on each line. 326 IAC 8-2-9 allows emissions of 10.3 pounds of VOC per gallon of solids for clear coatings and 5.07 pounds VOC per gallons of solids for coatings dried at temperatures greater than 90° C (194° F). Daily average allowable and actual emissions of volatile organic compounds (VOC) in pounds VOC per gallon of solids shall be calculated for each line based on gallons of solid delivered to the coating applicator, the pounds of VOC per gallon of solids, the type coating (clear or dried at temperature greater than 194° F), and the overall control efficiency of the incinerator.~~

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

Company Name: Crown Cork & Seal Company, Inc.
Address City IN Zip: Crawfordsville, Indiana
TV: 107-7940-00004
Reviewer: Peggy Zukas
Date: 03/15/99

326 IAC 8-1-2 Compliance Calculation Spreadsheet

Process Weighted Average									L							D	E	V	O
Material	Density of Coating (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Volume % Organics	Applied Coating Usage (gal/unit)	Maximum Production unit/hr	Pounds VOC per gallon of coating less water	Applicable emission limit 326 IAC 8-2-5 (Lbs VOC/Gal coating less water)	Density of VOC in coating (lbs VOC/Gal VOC)	Equivalent Emission Limitation (lbs VOC/gal coating solids) 326 IAC 8-1-2(b)	Actual VOC content of the coating (lbs VOC/gal coating solids)	Overall efficiency 326 IAC 8-1-2(c)				
Line 2																			
varnish	9.4	1.60%	0.0%	1.6%	0.0%	98.10%	1.9%	0.01250	4500	0.15	3.00	7.00	5.25	0.15	-3317.10%				
Line 3																			
Varnish 5132-040	7.9	54.20%	0.0%	54.2%	0.0%	40.70%	59.3%	0.00340	4500	4.29	3.00	7.00	5.25	10.55	50.22%				
Varnish 32-7730	8.6	35.30%	0.0%	35.3%	0.0%	54.53%	45.5%	0.00340	4500	3.04	3.00	7.00	5.25	5.58	5.92%				
Line 4																			
Varnish 5132-040	7.9	54.20%	0.0%	54.2%	0.0%	40.70%	59.3%	0.00340	4500	4.29	3.00	7.00	5.25	10.55	50.22%				
Varnish 32-7730	8.6	35.30%	0.0%	35.3%	0.0%	54.53%	45.5%	0.00340	4500	3.04	3.00	7.00	5.25	5.58	5.92%				
Line 5																			
BASF B1113-11	8.0	70.00%	0.0%	70.0%	0.0%	23.20%	76.8%	0.00260	6000	5.60	3.00	7.00	5.25	24.14	78.25%				
Watson 29-899-HV	8.0	84.56%	0.0%	84.6%	0.0%	25.20%	74.8%	0.00260	6000	6.76	3.00	7.00	5.25	26.84	80.44%				
Glidden 640C260	8.3	56.60%	0.0%	56.6%	0.0%	35.50%	64.5%	0.00260	6000	4.67	3.00	7.00	5.25	13.15	60.09%				
Line 6																			
BASF B1113-11	8.0	70.00%	0.0%	70.0%	0.0%	23.20%	76.8%	0.00260	6000	5.60	3.00	7.00	5.25	24.14	78.25%				
Watson 29-899-HV	8.0	84.56%	0.0%	84.6%	0.0%	25.20%	74.8%	0.00260	6000	6.76	3.00	7.00	5.25	26.84	80.44%				
Glidden 640C260	8.3	56.60%	0.0%	56.6%	0.0%	35.50%	64.5%	0.00260	6000	4.70	3.00	7.00	5.25	13.23	60.33%				
Aluminum Size W/S*	8.0	77.40%	0.0%	77.4%	0.0%	14.00%	86.0%	0.00260	6000	6.19	3.00	7.00	5.25	44.23	88.13%				
Aluminum Size W/S*	8.5	75.50%	0.0%	75.5%	0.0%	14.10%	86.0%	0.00260	6000	6.42	3.00	7.00	5.25	45.51	88.47%				

* The aluminum Size W/S came from permit applications for CP (107 1928) and PC (54) 1743. These coatings are considered worse case.

L = the applicable rule limit

D = the density of the VOC in the coating (default is 7.0)

E = Applicable emission limit / 1 - (applicable emission limit/density of VOC in coating)

V = Density of coating*(Weight % Organics/Volume % Non-volatile solids)

O = (Actual VOC content of coating - Equivalent Emission Limit)/Actual VOC content of coating

Appendix A: Potential Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Crown Cork & Seal Company
Address, City IN Zip: 400 N. Walnut St. Crawfordsville, IN
Title V: 107-7940-00004
Reviewer: Peggy Zukas
Date: 03/15/99

Material	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	Lb VOC /gal solids	Transfer Efficiency	Over all Control Efficiency
Line 2																	87.8%
Varnish	9.4	1.60%	0.0%	1.6%	0.0%	98.10%	0.01250	4500.000	0.15	0.15	8.48	203.47	37.13	0.00	0.15	100%	5.16
Line 3																	
Varnish 5132-040	7.9	54.20%	0.0%	54.2%	0.0%	40.70%	0.00340	4500.000	4.29	4.29	65.68	1576.26	287.67	0.00	10.55	100%	39.97
Varnish Watson 32-7730	8.6	35.30%	0.0%	35.3%	0.0%	54.53%	0.00340	4500.000	3.04	3.04	46.56	1117.34	203.91	0.00	5.58	100%	28.33
Line 4																	
Varnish 5132-040	7.9	54.20%	0.0%	54.2%	0.0%	40.70%	0.00340	4500.000	4.29	4.29	65.68	1576.26	287.67	0.00	10.55	100%	39.97
Varnish Watson 32-7730	8.6	35.30%	0.0%	35.3%	0.0%	54.53%	0.00340	4500.000	3.04	3.04	46.56	1117.34	203.91	0.00	5.58	100%	28.33
Line 5																	
BASF B1113-11	8.0	70.00%	0.0%	70.0%	0.0%	23.20%	0.00260	6000.000	5.60	5.60	87.36	2096.64	382.64	0.00	24.14	100%	53.17
Watson 29-899-HV	8.0	84.56%	0.0%	84.6%	0.0%	25.50%	0.00260	6000.000	6.76	6.76	105.53	2532.74	462.23	0.00	26.53	100%	64.23
Glidden 640C260	8.3	56.60%	0.0%	56.6%	0.0%	35.50%	0.00260	6000.000	4.67	4.67	72.84	1748.26	319.06	0.00	13.15	100%	44.33
Line 6																	
BASF B1113-11	8.0	70.00%	0.0%	70.0%	0.0%	23.20%	0.00260	6000.000	5.60	5.60	87.36	2096.64	382.64	0.00	24.14	100%	53.17
Watson 29-899-HV	8.0	84.56%	0.0%	84.6%	0.0%	25.50%	0.00260	6000.000	6.76	6.76	105.53	2532.74	462.23	0.00	26.53	100%	64.23
Glidden 640C260	8.3	56.60%	0.0%	56.6%	0.0%	35.50%	0.00260	6000.000	4.67	4.67	72.84	1748.26	319.06	0.00	13.15	100%	44.33
State Potential Emissions																	Total Potential after control is 213 tons/yr

Add worst case coating to all solvents

Total Potential after control is 213 tons/yr

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

Appendix A: Actual Emissions Calculations
VOC and Particulate
From Surface Coating Operations

Company Name: Crown Cork & Seal Company
Address, City IN Zip: 400 N. Walnut St. Crawfordsville, IN
Title V: 107-7940-00004
Reviewer: Peggy Zukas
Date: 03/15/99

Material	Density (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	Lb VOC /gal solids	Transfer Efficiency	Over all Control Efficiency
Line 2																	87.8%
Varnish	9.4	1.60%	0.0%	1.6%	0.0%	98.10%	0.01250	4500.000	0.15	0.15	8.48	203.47	11.87	0.00	0.15	100%	1.65
Line 3																	
Varnish 5132-040	7.9	54.20%	0.0%	54.2%	0.0%	40.70%	0.00340	4500.000	4.29	4.29	65.68	1576.26	91.95	0.00	10.55	100%	12.78
Varnish Watson 32-7730	8.6	35.30%	0.0%	35.3%	0.0%	54.53%	0.00340	4500.000	3.04	3.04	46.56	1117.34	65.18	0.00	5.58	100%	9.06
Line 4																	
Varnish 5132-040	7.9	54.20%	0.0%	54.2%	0.0%	40.70%	0.00340	4500.000	4.29	4.29	65.68	1576.26	91.95	0.00	10.55	100%	12.78
Varnish Watson 32-7730	8.6	35.30%	0.0%	35.3%	0.0%	54.53%	0.00340	4500.000	3.04	3.04	46.56	1117.34	65.18	0.00	5.58	100%	9.06
Line 5																	
BASF B1113-11	8.0	70.00%	0.0%	70.0%	0.0%	23.20%	0.00260	6000.000	5.60	5.60	87.36	2096.64	122.30	0.00	24.14	100%	16.99
Watson 29-899-HV	8.0	84.56%	0.0%	84.6%	0.0%	25.50%	0.00260	6000.000	6.76	6.76	105.53	2532.74	147.74	0.00	26.53	100%	20.53
Glidden 640C260	8.3	56.60%	0.0%	56.6%	0.0%	35.50%	0.00260	6000.000	4.67	4.67	72.84	1748.26	101.98	0.00	13.15	100%	14.17
Line 6																	
BASF B1113-11	8.0	70.00%	0.0%	70.0%	0.0%	23.20%	0.00260	6000.000	5.60	5.60	87.36	2096.64	122.30	0.00	24.14	100%	16.99
Watson 29-899-HV	8.0	84.56%	0.0%	84.6%	0.0%	25.50%	0.00260	6000.000	6.76	6.76	105.53	2532.74	147.74	0.00	26.53	100%	20.53
Glidden 640C260	8.3	56.60%	0.0%	56.6%	0.0%	35.50%	0.00260	6000.000	4.67	4.67	72.84	1748.26	101.98	0.00	13.15	100%	14.17
State Potential Emissions																	

Add worst case coating to all solvents

Actual emissions after control is 68.27 tons/yr

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)
Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
Total = Worst Coating + Sum of all solvents used

VOC and Particulate

From Surface Coating Operations for Non-beverage Cans

Company Name: Crown Cork & Seal Company, Inc.
Address City IN Zip: Crawfordsville, Indiana
TV: 107-7940-00004
Reviewer: Peggy Zukas
Date: 04/26/99

326 IAC 8-1-2 Compliance Calculation Spreadsheet

Process Weighted Average									L							D		E		V		O
Material	Density of Coating (Lb/Gal)	Weight % Volatile (H2O& Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Vol (solids)	Volume % Organics	Applied Coating Usage (gal/unit)	Maximum Production unit/hr	Pounds VOC per gallon of coating less water	Applicable emission limit 326 IAC 8-2-5 (Lbs VOC/Gal coating less water)	Density of VOC in coating (lbs VOC/Gal VOC)	Equivalent Emission Limitation (lbs VOC/gal coating solids) 326 IAC 8-1-2(b)	Actual VOC content of the coating (lbs VOC/gal coating solids)	Overall efficiency 326 IAC 8-1-2(c)							
Can coatings																						
PC-2 AKZ0220C	8.5	32.50%	0.0%	32.5%	0.0%	62.20%	37.8%	0.00340	4500	2.76	2.80	7.00	4.67	4.44	-5.07%							
PC-3 VALSPAR 5132-043	7.84	54.20%	0.0%	54.2%	0.0%	41.30%	58.7%	0.00340	4500	4.25	2.80	7.00	4.67	10.29	54.64%							
PC-4 PPG F-58	7.8	71.80%	0.0%	71.8%	0.0%	35.10%	64.9%	0.00340	4500	5.60	2.80	7.00	4.67	15.96	70.75%							
PC-4 VALSPAR 5132-043	7.84	54.20%	0.0%	54.2%	0.0%	41.30%	58.7%	0.00340	4500	4.25	2.80	7.00	4.67	10.29	54.64%							
C-5 W/S 32-773	8.67	36.00%	0.0%	36.0%	0.0%	54.00%	46.0%	0.00260	6000	3.12	2.80	7.00	4.67	5.78	19.26%							
C-5 W/S 29-899	8.07	75.70%	0.0%	75.7%	0.0%	15.40%	84.6%	0.00260	6000	6.11	2.80	7.00	4.67	39.67	88.24%							
C-5 NAT CI5A	7.95	74.00%	0.0%	74.0%	0.0%	23.00%	77.0%	0.00260	6000	5.88	2.80	7.00	4.67	25.58	81.76%							
C-6 GLIDDEN 640 C260	8.25	56.60%	0.0%	56.6%	0.0%	38.80%	61.2%	0.00260	6000	4.67	2.80	7.00	4.67	12.03	61.22%							
C-6 PPG H 27-127	11.65	30.60%	0.0%	30.5%	0.0%	49.80%	50.2%	0.00260	6000	3.55	2.80	7.00	4.67	7.14	34.60%							
C-6 GLIDDEN 662C1090	7.86	73.00%	0.0%	73.0%	0.0%	20.00%	80.0%	0.00260	6000	5.74	2.80	7.00	4.67	28.69	83.73%							
C-6 W/S 29-899	8.07	75.70%	0.0%	75.7%	0.0%	15.40%	84.6%	0.00260	6000	6.11	2.80	7.00	4.67	39.67	88.24%							
C-6 NAT CI5A	7.95	74.00%	0.0%	74.0%	0.0%	23.00%	77.0%	0.00260	6000	5.88	2.80	7.00	4.67	25.58	81.76%							

O = (Actual VOC content of coating - Equivalent Emission Limit)/Actual VOC content of coating